

## ABSTRACT OF THE DISCLOSURE

An application specific integrated circuit, ASIC, having an advanced high-speed bus, AHB, operating in Advanced Microcontroller Bus Architecture, AMBA, and a bridge for connecting to an off-chip device is disclosed. The bridge includes a logical section and a buffer section for modifying AMBA signals to accommodate the differing clock speeds, voltages and signals required by the off-chip device. The logic section includes clock division and registers to store variables identifying the off-chip device and data being transferred from the AHB to the off-chip device. The buffer section provides any conversion of signal voltage levels between the core ASIC voltages and the input/output voltages required by the off-chip device.